

## **ABSTRACT**

A method and apparatus for determining the service life of a cyclic system the method including the steps of determining at least one characteristic of the system to determine a characteristic value and determining a cycle time of the system. The at least characteristic value is applied to an algorithm in which the characteristic value is integrated to determine a diagnostic value, and comparing the diagnostic value to a predetermined value to determine the performance status of the system. The apparatus including a sensor for determining a system characteristic and a calculating unit operatively connected to the sensor. The calculating unit including circuitry for performing a mathematical integration on the system characteristic to determine a diagnostic value and comparing the diagnostic value to a predetermined value to determine the performance status of the system. A notification device operatively connected to the calculating unit for indicating the operational status of the system.